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VIRGINIA SECONDARY SCHOOL DROPOUTS, 1962-63. A RESEARCH CONTRIBUTION TO EDUCATIONAL PLANNING, NUMBER 1.

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DESCRIPTORS- *DROPOUTS, *DROPOUT RESEARCH, *HIGH SCHOOLS, *DROPOUT CHARACTERISTICS, *STATISTICAL DATA, VIRGINIA,

THE STATE'S 15,170 DROPOUTS IN GRADES 8 THROUGH 12 IN 1962-63 REPRESENTED 5 PERCENT OF THE HIGH SCHOOL PUPILS ENROLLED BUT A 0.5 PERCENT DECREASE FROM THE 15,813 DROPOUTS IN 1961-62. AN ANALYSIS OF DATA SHEETS OBTAINED FOR 12,721 DROPOUTS REVEALED--(1) THE LARGEST NUMBER DROPPED OUT AT AGE 16 AND FROM GRADE 8, (2) THE DROPOUT PATTERN SUGGESTED THAT THE PROBLEM DID NOT OCCUR AS A TIME OF CRISIS IN GRADE 8 BUT HAD ABOUT EQUAL IMPACT ON EACH HIGH SCHOOL GRADE LEVEL, (3) BEFORE AGE 16, MORE GIRLS THAN BOYS DROPPED OUT, (4) 70.9D PERCENT OF THE DROPOUTS HAD AN I.Q. BETWEEN 80 AND 109 MEASURED BY THE CALIFORNIA TEST OF MENTAL MATURITY, (5) 89 PERCENT OF THE MALE AND 66 PERCENT OF THE FEMALE DROPOUTS HAD FAILED AT LEAST ONE SUBJECT, (6) 57 PERCENT OF THE MALES AND 40 PERCENT OF THE FEMALES HAD BEEN RETAINED AT LEAST ONCE, (7) THE DROPOUT PERCENTAGE FROM THE ACADEMIC CURRICULUM WAS 7.9 PERCENT, THE VOCATIONAL CURRICULUM, 17.5 PERCENT, AND GENERAL CURRICULUM 69.2 PERCENT, AND (8) PRIMARY REASONS FOR DROPPING OUT, AS REPORTED BY COUNSELORS, WERE SUBJECT DIFFICULTIES, DISCIPLINARY PROBLEMS, THE DESIRE TO SEEK EMPLOYMENT, PARENTAL INDIFFERENCE, AND PROLONGED ABSENCE FROM SCHOOL. INVESTIGATION OF THE RELATIONSHIP BETWEEN THE DROPOUT RATE AND SELECTED CHARACTERISTICS OF THE EDUCATIONAL SETTING SUGGESTED THAT SCHOOL HOLDING POWER IS INFLUENCED BY THE SOCIOECONOMIC CONDITIONS SURROUNDING THE SCHOOL MORE THAN BY CHARACTERISTICS OF THE PROGRAM BEING PROVIDED BY THE SCHOOL. RECOMMENDATIONS FOR IMPROVING SCHOOL HOLDING POWER WERE (1) INVESTIGATE LOCAL CONDITIONS, (2) REVIEW SCHOOL STANDARDS, (3) IMPROVE PUPIL PERSONNEL SERVICES, AND (4) EXPERIMENT WITH PROGRAM MODIFICATION TO PROVIDE IMPROVED LEARNING EXPERIENCES. (EM)

A Research Contribution to Educational Planning . . .

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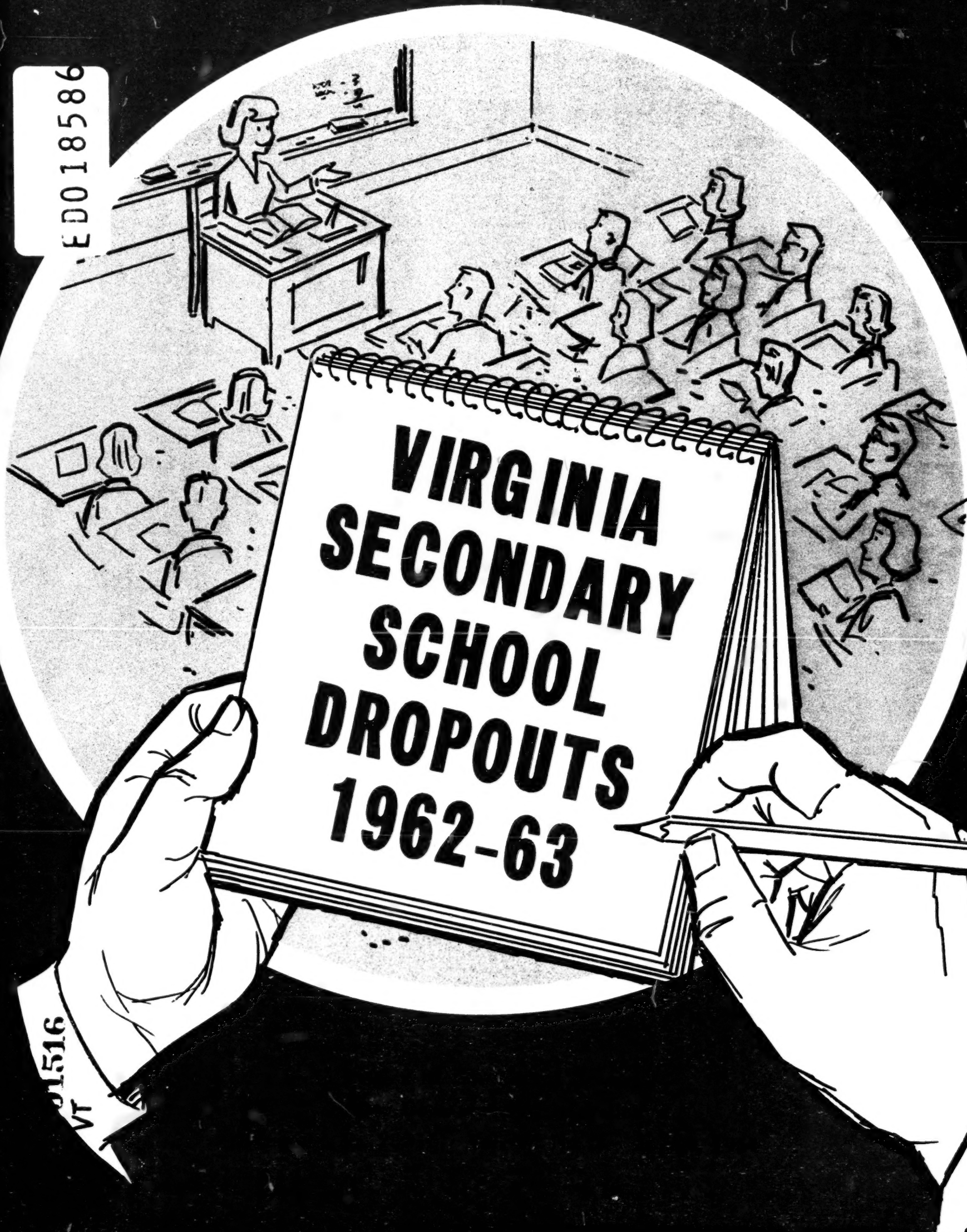

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VIRGINIA SECONDARY SCHOOL DROPOUTS, 1962-63.

A RESEARCH CONTRIBUTION TO EDUCATIONAL PLANNING, NUMBER 1

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INTRODUCTION

One of the functions of the Division of Educational Research is to conduct studies and research to provide the basis for better solutions to educational problems which are of concern to teachers, principals, supervisors, superintendents, and other educational leaders throughout the State. These studies will be conducted by persons in local school divisions and at institutions of higher education as well as by members of this Division. Publications in this series, of which this report is the first, will carry the group identification of *Research Contributions to Educational Planning*.

The dropout, the student who leaves school before graduation and does not enroll in another school, constitutes one of the major educational problems in our nation. In Virginia, as in other states, attention is being focused on dropouts in an effort to determine the reasons for students leaving school before graduation and to suggest steps that might be taken to encourage them to remain in school.

With these thoughts in mind, the State Superintendent of Public Instruction requested a detailed study of high school dropouts in Virginia during the 1962-63 school year. This study provides information which should be valuable to school officials in their efforts to improve the holding power of their secondary schools. Presented in four sections, the study (1) identifies the scope of the dropout problem in Virginia; (2) reviews the characteristics of Virginia secondary school dropouts; (3) summarizes the investigation of a possible relationship between selected school characteristics and the level of school holding power; and (4) discusses recommendations for planning school improvements.

The Division of Research is grateful for the assistance received from the Division of Secondary Education and Special Services in the State Department of Education and from principals and guidance personnel in public schools throughout the State.

It is hoped that this report will be useful to local school divisions as they seek to provide more effective programs for potential dropouts.

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I. THE SCOPE OF THE DROPOUT PROBLEM IN VIRGINIA

A study of the dropout problem is complicated by the fact that accurate statistics are difficult to obtain because some students may return to school after they have been reported as dropouts.

The Final Annual High School Reports filed with the State Department of Education at the end of each school session include a summary of the number of pupils who enrolled during the session and left before the end of the session. Those who are not recorded as having entered another school are reported as dropouts. Throughout the summer and into the next session, however, the reported number of dropouts may be modified as a result of reports coming from schools in which the dropouts subsequently enrolled. As a result, reports from schools located in areas having a high rate of population mobility may indicate a high percentage of dropouts unless ample time is allowed for correction of data after pupils have had an opportunity to enroll in another school.

During 1962-1963, Virginia public schools reported 15,170 dropouts in grades 8 through 12. This figure represents about 5.0 per cent of the pupils who were enrolled in the high school grades of this State. The 1962-1963 total, however, is an improvement over the previous school year when 15,813 pupils (5.5 per cent of the enrollment) in grades 8-12 were reported as dropouts.

It is encouraging to note that during the past 30 years, the holding power of Virginia public schools has increased steadily. At all age levels except one the proportion of the school age population enrolled in school has increased. The exception was the 14-15 year old group which showed a slight decline between 1950 and 1960. The per cent of the population enrolled in school during each of the U. S. census years is shown in Table 1.

Table 1

PER CENT OF SCHOOL AGE POPULATION IN VIRGINIA ENROLLED IN SCHOOL, 1930-1960

	1960	1950	1940	1930
7-13 years old	96.3	95.1	93.4	90.7
14-15 years old	89.8	91.4	83.6	81.3
16-17 years old	72.8	63.8	55.5	48.3
18-19 years old	36.2	25.2	22.5	21.6

SOURCE: *U. S. Census of Population, 1960, Virginia, General Social & Economic Characteristics,* Table 45, pp. 48-150.

Information in Table 1 reveals a condition which is an important factor in the study of causes of rate increases in school dropouts. Between 1930 and 1960 the schools have enrolled an increasingly larger proportion of the secondary school age population. During this period, for example, the per cent of population of ages 16 and 17 enrolled in school climbed from 48.3 to 72.8.

Prior to 1930 the secondary school was oriented to the needs of youth having the ability and motivation for continued schooling. The youth enrolled constituted less than half of the school age population. Since 1930, as Table 1 indicates, the proportion of the school age population enrolled in school has increased steadily. In 1960 almost three-fourths of the high school age population was enrolled. The impact of the enrollment of this additional quarter of the school age population, with pupils representing a greater section of the full range of mental ability and motivation for school completion, has not been fully met by modifications in secondary school offerings and standards. As a result, increasing numbers of school age youth are leaving schools as early as the law and their parents will permit.

Compared to the average for the nation, Virginia does not enroll in school as many persons age 16 and above as it should. This fact is reflected in Table 2 which is based on Census Bureau figures for the percentages of population enrolled in school in Virginia and in the nation in 1950 and 1960.

Table 2

PER CENT OF SELECTED SCHOOL AGE POPULATION ENROLLED IN SCHOOL IN 1950 AND 1960 IN VIRGINIA AND IN THE UNITED STATES

AGE	1950		1960	
	Virginia	U. S.	Virginia	U. S.
16 and 17 years old	63.8	74.5	72.8	80.9
18 and 19 years old	25.2	32.3	36.2	42.1

SOURCE: *U. S. Census of Population, 1960.*

Although Virginia is below the U. S. average in the proportion of high school age population enrolled in school, progress has been made during the past 10 years in reducing the difference between the State and national average in the percentage of persons between 16 and 19 years of age enrolled in school.

Another evidence of the relatively poor holding power of Virginia secondary schools is the summary of school holding power prepared by the U. S. Office of Education. The per cent of ninth grade enrollment in 1958-1959 represented by the graduating class in 1961-1962 was calculated for each state and the total for all states. Summarized in Table 3, the percentages for the states ranged from 56.8 per cent to 82.7 per cent. The U. S. average was 69.7 per cent.

Table 3

DISTRIBUTION OF THE 50 STATES BY LEVEL OF THE HOLDING POWER OF THEIR PUBLIC SCHOOLS

PER CENT OF NINTH GRADE ENROLLMENT IN 1958-59 GRADUATING IN 1961-62	Number of States
80–82	5
76–79	7
72–75	7
68–71	10
64–67	6
60–63	7
56–59	8

SOURCE: U. S. Department of Health, Education, and Welfare, Office of Education, Studies and Surveys Branch.

Since states receiving new residents benefit in this type of statistic, the data have limited validity. Virginia, with the 1961-1962 graduates representing only 62.4 per cent of the ninth grade enrollment in 1958-1959, ranks at about the top of the bottom one-fourth of the states in holding power.

The secondary school dropouts represent a significant proportion of the school age population in Virginia. A study of the characteristics of these dropouts and investigation of conditions contributing to their leaving school is a worthwhile approach to planning for continued school improvement.

II. CHARACTERISTICS OF PUPILS DROPPING OUT OF VIRGINIA HIGH SCHOOLS DURING SESSION 1962-1963

Pupil dropout data sheets were prepared by local school personnel for each pupil in grades 8-12 who dropped out of school during session 1962-1963. Data sheets for 12,721 dropouts were returned to the State Department of Education for processing. These represented 84 per cent of the number of dropouts reported in the *Final Annual High School Reports*. No data sheets were returned from 40 schools which had reported 484 dropouts during session 1962-1963. From an additional 48 schools, 542 forms were received for fewer than half of the number of dropouts, 1,466, which these schools reported for the session. Of the 486 schools housing one or more of grades 8-12, about 8 per cent are not represented. An additional 10 per cent of the schools returned forms reporting fewer than half of their dropouts.

The following summaries are based on the assumption that the completed pupil dropout data sheets are a representative sample of all dropouts in Virginia. An estimate of the accuracy of this assumption is made through a review of the enrollment in schools which are inadequately represented. The distribution by total enrollment of all schools enrolling pupils in grades 8-12 and the number of schools which are inadequately represented are listed in Table 4.

Table 4

DISTRIBUTION BY SIZE OF ALL HIGH SCHOOLS AND THE HIGH SCHOOLS INADEQUATELY REPRESENTED IN THE STUDY

ENROLLMENT IN HIGH SCHOOL GRADES	Total Number of Schools	Number of Inadequately Represented Schools
1401 +	61	2
1101–1400	40	5
801–1100	50	5
601–800	59	9
401–600	70	13
301–400	50	11
201–300	64	18
151–200	21	2
101–150	28	7
76–100	13	4
...–75	30	12
Total	486	88

The enrollment pattern of schools which are inadequately represented is very similar to that of all secondary schools in Virginia during the 1962-1963 session. The distribution by enrollment of schools which are not adequately represented is similar to that which would be expected in random samples of 88 schools drawn from the Virginia population of secondary schools. Therefore, it was concluded that the student dropout data forms may be used as a representative sample of all school dropouts and that the influence of factors related to school size is weighted in the sample in the same manner it would be weighted if the entire dropout population were available.

Pupil dropout data sheets were received for 3,684 students enrolled in grades 8-12 at the close of the 1962-1963 session who did not enroll in the 1963-1964 session by September 30, 1963 (summer dropouts). A summary of the characteristics of these pupils is included as a separate section at the end of this chapter.

Several characteristics of dropouts have been identified in studies made throughout the nation. Some of these characteristics appear to have a cause and effect relationship. A summary of the findings from the dropout data forms in which personal characteristics, degree of success in school, and home conditions are reported is included in this chapter. (Since information necessary for some of the classifications used in the following tables was omitted from some dropout data sheets, the totals shown are not necessarily equal to the sum of the listed component data.)

Age

Table 5 contains statistics on the ages of boys and girls who dropped out of secondary schools during 1962-1963. While the largest number of pupils, 4,146, left school at age 16, they represent a smaller proportion of the total enrollment of their age than is represented by the 18 and 19 year old students who dropped out of school. The number of pupils of ages 16 and 17 represent 33 and 24 per cent, respectively, of all dropouts.

Table 5

DISTRIBUTION OF DROPOUTS BY AGE AND BY SEX

AGE	Number of Boys	Number of Girls	Number of Boys Per Girl	Total Number	Per Cent of Age Enrollment
12	4	4	1.0	8	.1
13	47	71	.7	118	.2
14	265	303	.9	574	.9
15	887	1,054	.8	1,953	2.6
16	2,327	1,796	1.3	4,146	8.0
17	1,778	1,249	1.4	3,036	8.0
18	1,136	661	1.7	1,807	16.1
19	442	200	2.2	644	19.1
20	149	55	2.7	205	26.7
21 or above	40	26	1.5	67	...
Not Reported	77	52	...	163	...
Total	7,152	5,471	1.31	12,721	...

The increasing proportion of older pupils who quit school suggests that the dropout problem does not occur as a time of crisis at about age 16 but includes a series of crises which begins at age 15 or before and continues through the later high school years.

The ratio of boys per girl changes at age 16. Prior to this age the number of girl dropouts exceeds the number of boys. This suggests a sex-related difference in the motivation of many pupils who leave school before graduation.

Grade Level

The number of pupils leaving school at each grade level is indicated in Table 6. The largest number of pupils leave school during grade 8. The proportion of grade level enrollment represented by dropouts, however, is about the same from grade 8 through grade 11. This, again, suggests that the dropout problem does not occur as a time of crisis in grade 8 but has about equal impact on each grade level in each of the high school years.

Table 6

DROPOUTS BY GRADE CLASSIFICATION, SESSION 1962-1963

GRADE	Number of Dropouts	Per Cent of Dropouts	Per Cent of Enrollment Dropping Out	Number of Boys Per Girl
8.....	3,502	28.16	4.40	1.8
9.....	2,966	23.85	4.13	1.4
10.....	2,781	22.37	4.31	1.2
11.....	2,015	16.21	4.31	1.1
12.....	1,170	9.41	3.09	1.0
Total.....	12,434	100.00	4.14	1.3

Again, the relationship of the number of boys and girls changes with a relatively large number of boys leaving while enrolled in the lower high school grades and a relatively large number of girls leaving while enrolled in the upper grades.

Sex

The number of boys per girl dropout is recorded by age, grade, and race in Tables 5 and 6. Boys leave school in larger than average proportions while enrolled in grades 8 and 9, and girls drop out in larger proportions in the later grades. This ratio is reversed in the distribution of dropouts at each age. The ratio is about average at age 16 with higher than average proportions of girls leaving before this age and higher proportions of boys leaving at ages 18 and above. These distributions indicate that the age-grade relationships may be near normal for many girl dropouts and that a relatively high proportion of boy dropouts may be overage for their grade when they leave school. These outcomes may suggest a difference in the motivation of boys and girls who leave school prior to graduation.

Intelligence

A distribution of the intelligence quotients as determined by the California Tests of Mental Maturity and reported for school dropouts is shown in Table 7. This information was not reported in about 30 per cent of the data sheets. The median I. Q. of approximately 90 indicates that about half of these pupils may have encountered considerable difficulty in completing satisfactorily the typical academic content of the upper high school grade levels.

Table 7

PERCENTAGE DISTRIBUTION OF TOTAL INTELLIGENCE QUOTIENTS OF SCHOOL DROPOUTS, BY SEX AND RACE

INTERVAL	WHITE		NEGRO		Total Pupils
	Boys	Girls	Boys	Girls	
140–149	....	.18	.16	.30	.11
130–139	.27	.22	.32	.49	.28
120–129	1.64	1.81	.64	.69	1.44
110–119	8.25	7.91	2.54	2.86	6.71
100–109	19.05	19.12	9.14	8.98	16.50
90–99	29.82	29.85	21.30	23.10	27.84
80–89	25.66	25.30	29.25	30.01	26.56
70–79	11.44	11.49	22.34	19.75	13.97
60–69	2.95	3.14	11.37	9.18	4.93
50–59	.53	.40	1.75	2.57	.90
50 or less	.39	.58	1.19	2.07	.76

The intelligence characteristics of boy and girl dropouts are very similar. Information in these distributions suggests that (1) sex-related differences in dropouts may not be attributable to differences in scholastic ability, and (2) inadequate scholastic ability is not a factor contributing to discontinuance of school for a sizeable proportion of the dropouts.

Another estimate of scholastic potential is provided by the performance on the Differential Aptitudes Test Battery of dropouts while in grade 7. Again, interpretation of these data must be limited since these scores were reported in only 60 per cent of the data sheets. The stanine distributions of test scores of dropouts in the verbal reasoning and the numerical ability subtests are given in Table 8.

Table 8

STANINE DISTRIBUTION OF PERFORMANCE OF DROPOUTS IN SELECTED SUBTESTS OF THE DIFFERENTIAL APTITUDES TEST BATTERY

STANINE	Theoretical Norm Percentage	PER CENT OF DROPOUTS	
		Verbal Reasoning	Numerical Ability
9	4	1.6	2.3
8	7	1.4	1.7
7	12	3.0	3.3
6	17	7.7	7.9
5	20	18.0	20.2
4	17	12.3	18.6
3	12	20.7	21.0
2	7	23.8	14.8
1	4	11.5	10.2

Stanines represent theoretically equal steps of difficulty in test performance with the average score occurring in the fifth interval and the lowest scores located in the first interval. These distributions support the conclusion suggested by the distribution of intelligence quotients. Performance on these two subtests of the DAT reveals slightly higher aptitude in numerical tasks than verbal tasks. Almost half of the dropouts for whom DAT scores were reported had ability within the average or above average levels.

Achievement

The adequacy of achievement status of school dropouts may be assessed by a review of the age-grade relationship, the distribution of standardized test scores, and the number of high school courses which were being failed.

Listed in Table 9 is a distribution of the achievement in reading of dropouts as measured by the Iowa Silent Reading Tests administered when the dropouts were in grade 7. Based on the assumption that the achievement characteristics of the more than one-third of these pupils for whom no test scores were reported did not differ greatly from the other dropouts, the achievement patterns of dropouts parallel the patterns of intellectual ability. The median level of achievement in reading of school dropouts is in the lower part of the range of average performance levels.

The distribution of reading achievement of white girl dropouts does not differ widely from that to be expected of pupils having slightly below average ability characteristics. Larger than expected proportions of Negro pupils ranked in the lowest levels of performance in the standardized test in Reading. About half of the white dropouts and about one-third of the Negro dropouts demonstrated average or above average achievement in Reading.

Table 9

PERCENTAGE OF DROPOUTS ACHIEVING AT EACH STANINE LEVEL IN READING

STANINE	PERCENTAGE OF DROPOUTS					Percentage in Theoretical Norm
	White		Negro			
	Boys	Girls	Boys	Girls	Total	
9	2.0	1.7	1.1	1.6	1.7	4
8	2.9	4.0	1.1	1.4	2.8	7
7	6.4	8.9	2.9	3.2	6.3	12
6	9.5	11.8	6.5	5.8	9.4	17
5	17.9	21.5	8.9	15.9	17.5	20
4	18.4	21.1	10.0	14.3	17.5	17
3	16.8	14.8	15.6	19.0	16.3	12
2	12.7	9.1	17.4	15.6	12.6	7
1	13.4	7.1	36.5	23.3	15.9	4
Total	100.0	100.0	100.0	100.0	100.0	100

The adequacy of school achievement was assessed by reviewing the course status of dropouts at the time of withdrawal. Counselors differed in their definition of high school subjects; some reported all one-semester courses and others reported only the full year courses. Therefore, summaries of the number of subjects taken and the number of subjects failed prior to the 1962-1963 session have little meaning. Despite the definition of subjects, however, the summary of the passing-failing condition at the time of withdrawal has meaning. Listed in Table 10 is the distribution of dropouts by sex and by the number of subjects in which progress was not satisfactory at the time of withdrawal.

Table 10

DISTRIBUTION OF BOY AND GIRL DROPOUTS BY NUMBER OF SUBJECTS FAILED OR BEING FAILED

NUMBER OF SUBJECTS FAILED OR BEING FAILED	BOYS		GIRLS	
	Number	Per Cent	Number	Per Cent
None	685	10.7	1,609	33.0
1	617	9.6	652	13.4
2	903	14.1	653	13.4
3	1,156	18.0	578	11.9
4	1,413	22.1	579	11.9
5	1,279	20.0	594	12.2
6	315	4.9	178	3.7
More than 6	37	.6	24	.5
Sub-Total	6,405	100.0	4,867	100.0
Not Reported	747	....	604	....
Total	7,152	....	5,471	....

Again, a sex difference in dropout motivation is suggested by the fact that one-third of the girls and only one-tenth of the boys were making satisfactory progress at the time of withdrawal from school. The proportion of girl dropouts levels off to a rate of approximately 12-13 per cent failing one or more subjects. Among boys the number of courses being failed rises to a peak of four subjects at the time of withdrawal.

Race

The number of white and Negro dropouts at each grade level, the proportion of the grade enrollment, and the relationship of the number of boys and girls are shown in Table 11. The level of school holding power is higher for white than for Negro pupils. While the largest number of dropouts of both races occurs in grade 8, the distributions of the proportions of the total grade level enrollment represented by the dropouts differ. The pattern among white dropouts is relatively stable from grade 8 through 11 while the rate for Negro dropouts increases in grades 10 and 11. The relationship of boys and girls is approximately the same for white and Negro dropouts at each grade level.

Table 11

NUMBER AND PER CENT OF GRADE ENROLLMENT DROPPING OUT, BY RACE

GRADE LEVEL	WHITE			NEGRO		
	Number	Per Cent	Number of Boys Per Girl	Number	Per Cent	Number of Boys Per Girl
8	2,496	4.1	1.8	972	5.3	1.6
9	2,136	3.8	1.4	809	5.3	1.4
10	1,940	3.7	1.2	823	6.6	1.1
11	1,468	3.9	1.1	536	6.1	1.0
12	864	2.8	1.0	296	4.3	.7

Related to total enrollments, the rate of Negro dropouts is 1.5 times higher than that of white pupils. The proportionality of the number of dropouts of each sex and race was investigated. The dropout rate among Negro girls was higher than expected when compared to the proportion of white boy and girl dropouts.

Investigation was made of the statistical significance of the differences in the proportions of the total school population represented by dropouts of each sex and race. Related to the total school enrollment, the dropout rate of Negro pupils is higher than that of white students and the dropout rate of boys is higher than that of girls. Within both of the race groupings of pupils, the rate for boys is significantly higher than that for girls. The proportion of total population represented by dropouts was significantly different between each sex and race grouping with the dropout rate in descending order as follows: Negro boys, Negro girls, white boys, white girls.

Listed in Table 12 are the distributions of dropouts by age and race.

Table 12

DISTRIBUTION OF DROPOUTS BY AGE AND RACE

AGE	WHITE		NEGRO	
	Number	Per Cent of Enrollment	Number	Per Cent of Enrollment
12	5	.1	3	.2
13	67	.2	51	.5
14	354	.7	214	1.6
15	1,314	2.2	627	4.4
16	3,151	7.6	972	9.2
17	2,188	7.4	839	10.5
18	1,305	16.5	492	14.9
19	436	19.6	206	18.0
20	140	28.5	64	23.0
21 +	44	....	22	....
Total	9,004		3,490	
	91	Not Reported	38	Not Reported

The age distributions of white and Negro dropouts are similar with the largest number of dropouts of each race leaving school at age 16. The percentage of age enrollment represented by white dropouts changes from levels below that of Negro dropouts to higher levels beginning at age 18. Characteristics of dropouts grouped by race are summarized in several of the remaining tables of the report. In most characteristics, the distribution of dropouts of each race are similar; the major difference being the presence of several contributing conditions among a higher proportion of Negro dropouts than is noted among white dropouts.

Sex

As already noted, the dropout rate for boys is significantly higher than that for girls. Several characteristics suggest a sex-related difference in the motivation of many students who drop out of school.

Retentions

An indication of the achievement status is provided by a review of the number of grades which pupils have repeated before enrolling in grade 8. Summarized in Table 13 are the number of boy and girl dropouts reported to have repeated one or more grades before reaching grade 8.

Table 13

DISTRIBUTION OF NUMBER OF GRADES REPEATED BY DROPOUTS BEFORE GRADE 8, BY SEX AND RACE

NUMBER OF GRADES REPEATED	BOYS		GIRLS		TOTAL			
					White		Negro	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
None	2,385	43.5	2,476	59.7	3,391	49.1	1,470	53.9
One	1,741	31.8	1,027	24.8	2,075	30.1	693	25.4
Two	1,004	18.3	481	11.6	1,097	15.9	388	14.2
Three	257	4.7	124	3.0	255	3.7	126	4.6
More Than Three	95	1.8	39	.9	83	1.2	51	1.9
Total Reported	5,482	100.0	4,147	100.0	6,901	100.0	2,728	100.0
Not Indicated	1,670	.....	1,324	.....	2,194	.....	800	.....
Total	7,152	.....	5,471	.....	9,095	.....	3,528	.....

About half of the dropouts for whom information was reported had not been retained in grades 1-7. Boys appear to have had more scholastic difficulties in elementary schools than did girls. Negro dropouts do not appear to have experienced retentions prior to grade 8 to as high a degree as white dropouts. Information about the number of grades in which dropouts had been retained prior to grade 8 was not given in about 23.8 per cent of the dropout data sheets.

Another approach to estimating the impact of grade retentions is a review of the age-grade relationship of school dropouts. Summarized in Table 14 are the percentages of the total school enrollment and percentages of dropouts who were more than two years older than the age reported for the largest number of pupils in each grade level. The data are not directly comparable since the age of dropouts may be given as of the date of withdrawal rather than as of the date used in preparing the age-grade distribution (October 1, 1962). Therefore, it may be expected that the percentage reported as being more than two years over age may be somewhat higher for dropouts due to the possibility of as much as 8 months difference in the date on which the age is calculated.

Table 14

PERCENTAGE OF PUPILS AND DROPOUTS ABOVE THE MODAL AGE OF THEIR GRADE LEVEL, BY SEX AND RACE

RACE AND GRADE	PERCENTAGE OVER AGE				
	More Than 2 Years			More Than 3 Years	
		Dropouts		Dropouts	
	All Pupils	Boys	Girls	Boys	Girls
WHITE PUPILS					
8.....	4.4	67.2	51.2	19.8	11.6
9.....	2.7	40.5	23.9	13.3	7.0
10.....	1.8	28.8	11.6	8.7	2.8
11.....	1.6	18.0	8.4	5.3	1.7
12.....	1.1	12.6	4.4	....	....
NEGRO PUPILS					
8.....	9.0	55.2	43.1	23.2	15.1
9.....	6.1	49.8	25.3	20.0	9.3
10.....	4.3	26.4	12.7	8.3	2.9
11.....	4.1	23.4	11.9	8.0	3.4
12.....	2.8	13.7	6.3	....	....

A high proportion of boy and girl dropouts are over age for their grade placement. The percentage of dropouts who were more than three years older than the age reported for the largest number of pupils in a given grade ranges from 1.5 to 4.0 times as large as that reported for all pupils. More boy dropouts are over age than are girl dropouts. After grade eight the percentage of boy dropouts who are more than three years over age is about twice as high as that of girl dropouts. This condition, again, suggests a sex difference in the motivation of many dropouts.

The percentage of over age pupils is higher among Negro pupils than among white pupils. Related to the age-grade relationship of all pupils of their race, the difference between dropouts and the total school enrollment is lower for Negro pupils than for white.

Pupil Load

The number of subjects being taken by dropouts is similar to the pattern for all students. Approximately three-fifths of the dropouts (58.7 per cent) were taking five subjects; 18.8 per cent were taking four subjects; and 22.3 per cent were taking six subjects. A small proportion of dropouts were part-time students carrying less than a normal pupil load of four or five subjects. Differences in the interpretation by counselors of the number of subjects carried (whether or not health and physical education are considered as a subject) may account for some of the differences in the total number of subjects being taken.

Course of Study Objectives

The course of study objectives of school dropouts are summarized in Table 15. These provide a general indication of the extent to which the most appropriate offering of the school is being made available to potential dropouts.

Table 15

DISTRIBUTION OF COURSE OF STUDY OBJECTIVES OF SCHOOL DROPOUTS, BY SEX AND RACE

Course of Study	Boys				Girls				Total	
	White		Negro		White		Negro			
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Academic...	335	6.6	145	7.6	276	7.3	220	14.4	982	7.9
Vocational...	797	15.6	331	17.5	782	20.5	248	16.2	2,175	17.5
General.....	3,809	74.6	1,326	69.9	2,458	64.6	945	61.8	8,602	69.2
Other.....	164	3.2	95	5.0	290	7.6	117	7.6	672	5.4
Total...	5,105	100.0	1,897	100.0	3,806	100.0	1,530	100.0	12,431	100.0
Not Reported...	101	....	49	....	83	....	52	....	290	....
Total Responding.	5,206	....	1,946	....	3,889	....	1,582	....	12,721	....

The largest numbers of dropouts were enrolled in the general program of studies in Virginia high schools. The next most frequently identified course objective is in the vocational fields. A relatively high number of Negro girls are enrolled in an academic program of studies.

A review of the ability characteristics of pupil dropouts suggests that the course objectives may be appropriate for most dropouts. The general course of study provides maximum flexibility in the selection of elective subjects and appears to be the most realistic way for students to be placed in classes in which there is reasonable expectation for success. The relatively large number of girls enrolled in the vocational and academic programs appears to be realistic in terms of the successful school experience reported for a high proportion of the girls. The similarity in the distributions of scholastic ability of boy and girl dropouts, however, suggests the possibility that additional numbers of boy dropouts should have been encouraged to pursue academic or vocational course objectives.

Participation in School Activities

About 23.5 per cent of the dropouts are reported to have been participants in some type of school-sponsored activity. It is difficult to evaluate the significance of this finding since the percentage of the total school population involved in school-sponsored activities is not available. However, the extent of participation is far below the estimated level of all pupils and the ideal of schools desiring to enrich the educational offering for all students through extensive school-sponsored activities. The apparent low extent of participation in school activities suggests that many of the dropouts may not be interested in being a part of the school-related events and activities which interest most pupils. This lack of interest may be based on a set of values, or it may reflect a deficiency in social adjustment among many of these pupils.

Reason for Dropping Out of School

The responses and opinions of counselors about the primary and secondary reason for boys and girls leaving school were summarized for all dropouts and for the dropouts for whom sex and intelligence were also indicated. Summarized in Table 16 are the reasons for dropping out given most frequently by pupils and by the school.

Table 16

SUMMARY OF PRIMARY REASONS FOR DROPPING OUT AS REPORTED BY COUNSELORS

REASON FOR LEAVING	NUMBER CITING THE CONDITION AS PRIMARY REASON					
	Boys		Girls		Total	
	Pupil	Counselor	Pupil	Counselor	Pupil	Counselor
Subject Difficulties	1,579	1,738	736	819	2,333	2,580
Marriage	131	119	1,637	1,441	1,775	1,587
To Seek Employment	1,145	566	314	132	1,475	705
Prolonged Absence from School	524	501	296	305	824	813
Influence of Out-of-School Associates	368	523	186	316	557	845
Health Problems	249	205	602	520	859	729
Disciplinary Problems	459	570	67	85	532	642
Military Service	502	285	11	5	514	291
Financial Difficulties at Home	298	258	169	158	475	422
Parental Indifference	235	534	207	411	446	953
Other	1,446	1,582	1,100	1,083	2,566	2,682
Not Reported	215	270	146	196	365	472

Responses by counselors indicate that the primary reason why boys leave school prior to graduation is subject difficulties. This condition is cited by counselors as the primary cause more than three times as often as the next most frequently identified reason. Four conditions: disciplinary problems, the desire to seek employment, parental indifference, and prolonged absence from school were ranked about equally as being the second most frequently identified primary reason for leaving by boys. The major reasons given by boys were in general agreement with those given by counselors. Boys, however, gave greater emphasis than did counselors to employment and military service.

The list of reasons for leaving school reported for girls is different from that for boys. Marriage is reported as the major reason why girls leave school. Subject difficulties ranked second and health problems third.

It appears, therefore, that a major difficulty which is shared by a large number of school dropouts is that of maintaining satisfactory achievement in school. The age-grade relationship and the number of courses being failed suggest that many of the other major reasons may be heavily influenced by this basic difficulty.

Characteristics Related to Ability of School Dropouts

Since subject difficulties appear to be contributing to the decision of many dropouts to leave school, an investigation was made of the possible differences in the characteristics of school dropouts having either: (1) intellectual capacity sufficient for reasonable success in school; or, (2) limitations in intellectual capacity that would probably result in low performance in typical scholastic activities. The data cards of dropouts were separated on the basis of the reported total intelligence quotient. Dropouts having an intelligence quotient of 89 or below were placed in a

group which was considered to have a low potential for scholastic success. The dropouts having an intelligence quotient of 90 or above were considered as having an average or better than average chance for reasonable success in scholastic endeavors at the secondary school level.

The number of boys and girls of each race in these groupings is reported in Table 17.

Table 17

NUMBER OF DROPOUTS IN ABILITY GROUPINGS, BY SEX AND RACE

ABILITY GROUPING	NUMBER OF DROPOUTS			
	White		Negro	
	Boys	Girls	Boys	Girls
Average or Higher.....	2,231	1,635	430	369
Low.....	1,539	1,124	828	637

The proportionality of the numbers of dropouts in the ability classification by sex and race was investigated. The numbers of boy and girl dropouts are proportional in the two ability classifications. As expected from the generally lower intelligence level of non-white dropouts, the groupings are not proportional between white and Negro dropouts. Among both boys and girls, the number of Negro dropouts in the low ability classification is larger than the number to be expected on the basis of the relationship of the number of white pupils in each ability classification.

The data cards were combined to form groups of boys and girls at each ability level. A summary of the percentage of the dropouts in each subgrouping exhibiting each of several characteristics is listed in Table 18.

Table 18

PERCENTAGE DISTRIBUTION OF SELECTED CHARACTERISTICS OF DROPOUTS BY LEVEL OF ESTIMATED ABILITY AND BY SEX

CHARACTERISTIC	LOW ABILITY			AVERAGE OR HIGH ABILITY		
	Boys	Girls	Total	Boys	Girls	Total
GRADE						
8	46.5	35.6	41.9	22.1	14.8	19.0
9	26.5	26.3	26.4	24.1	21.9	23.1
10	16.2	20.5	18.0	24.7	27.7	26.0
11	7.9	12.1	9.7	18.1	20.9	19.3
12	2.9	5.5	4.0	11.0	14.7	12.6
AGE						
13	.3	.4	.4	.9	2.0	1.4
14	3.2	5.1	4.0	4.3	6.7	5.3
15	12.9	20.0	15.9	12.8	22.2	16.9
16	37.7	36.8	37.3	32.4	32.4	32.4
17	23.7	20.5	22.4	25.6	22.6	24.3
18	14.0	12.0	13.1	16.2	10.6	13.8
19	5.6	3.4	4.7	5.7	2.7	4.4
20 +	2.6	1.8	2.2	2.1	.8	1.5
NUMBER OF GRADES REPEATED						
None	26.8	42.1	33.3	57.3	74.9	64.9
One	34.8	32.3	33.7	30.2	19.4	25.5
Two	27.9	18.7	24.0	10.2	4.7	7.8
Three or More	10.5	6.9	9.0	2.3	1.0	1.8
SUBJECTS FAILING						
None	7.4	24.0	14.6	13.6	41.4	25.8
One	8.1	12.4	10.0	10.9	13.6	12.1
Two	12.3	13.0	12.6	12.8	14.1	13.4
Three	17.5	15.3	16.6	19.4	9.8	15.2
Four	24.8	14.3	20.2	20.9	9.6	15.9
Five or Six	29.9	21.0	26.0	22.4	11.5	17.6

Compared with dropouts having higher ability, low ability dropouts tend to (1) leave school at earlier grade levels, (2) experience more failure in scholastic endeavors prior to reaching high school, and (3) fail more subjects at the time of leaving school. Evidence not shown in this report also suggests that the low ability dropouts perform at lower levels than high ability dropouts. The distributions of age of dropouts are similar between the ability level groupings.

The sex-related differences observed earlier in the characteristics of dropouts are noted again in each of these subgroupings in which the influence of scholastic ability is reduced. Compared with boy dropouts having similar scholastic ability, girl dropouts tend to attain higher grade levels, leave at an earlier age, have satisfactory educational progress at the time of withdrawal, and have attained satisfactory scholastic progress prior to entering the eighth grade.

The distribution of the primary cause of dropping out revealed by counselors for dropouts in the sex and ability groupings are listed in Table 19. Subject difficulties contribute heavily to school withdrawal of boys at both levels of ability and among girls of low ability. Marriage is the major cause of dropping out among girls at both levels of ability. This factor operates to a greater extent among girls in the high ability groups.

Table 19

PERCENTAGE DISTRIBUTION OF PRIMARY REASONS FOR DROPPING OUT REPORTED BY COUNSELORS FOR DROPOUTS HAVING LOW AND HIGH ABILITY, BY SEX

PRIMARY CAUSE	BOYS		GIRLS	
	Low Ability	High Ability	Low Ability	High Ability
Subject Difficulties	33.0	19.1	22.7	9.0
Marriage	1.5	2.2	22.9	32.2
Parental Indifference	7.5	7.4	7.8	12.2
Influence of Out-of-School Associates	7.7	7.7	6.2	5.6
Prolonged Absence from School	8.0	7.3	5.2	5.1
To Seek Employment	8.6	8.1	2.4	2.0
Health Problems	2.4	3.7	9.2	10.2
Disciplinary Problems	6.7	9.7	.9	1.7
Financial Difficulties at Home	4.0	3.3	3.2	2.4
Reading Difficulties	4.7	1.9	1.5	.3
Military Service	2.0	4.8	0.0	.1
Others	13.9	24.8	18.0	19.2
Total Reported	100.0	100.0	100.0	100.0

Disciplinary problems and military service are reasons for dropping out to a higher extent among boys having high ability than among boys having low ability. Also, the primary reasons for leaving school by boys with high ability appear to be more varied than among those of low ability; about 25 per cent were in areas other than the 11 most frequently identified for all dropouts.

Slight differences in reasons other than marriage and subject difficulties are noted among girl dropouts at the two levels of ability. Girl dropouts of higher ability are influenced more by parental indifference and are influenced less by difficulties in scholastic achievement than is noted among girl dropouts of lower ability.

Home Conditions

The decision to leave school prior to graduation may be influenced significantly by the conditions encountered by pupils during out-of-school hours. Reviewed in the following sections are selected characteristics of the home environment of school dropouts.

Parental Attitude Toward School Attendance

The degree to which parents encourage or require school attendance may be an important influence upon high school completion. Summarized in Table 20 is the pattern of parental influence reported for school dropouts grouped by estimated level of ability.

Table 20

PERCENTAGE DISTRIBUTION OF DROPOUTS BY PARENTAL ATTITUDE TOWARDS SCHOOL ATTENDANCE, BY SEX, RACE, AND ABILITY

ABILITY AND PARENTAL ATTITUDE	WHITE		NEGRO		Total
	Boys	Girls	Boys	Girls	
AVERAGE OR ABOVE ABILITY					
Parents Favorable	47.0	50.6	54.3	64.3	50.5
Parents Not Favorable	9.3	8.5	9.7	4.9	8.5
Parents Indifferent	43.7	40.9	36.0	30.8	41.0
BELOW AVERAGE ABILITY					
Parents Favorable	36.6	34.7	44.5	53.1	40.4
Parents Not Favorable	8.2	9.6	9.3	6.6	8.5
Parents Indifferent	55.2	55.7	46.2	40.3	51.1

Fewer than half of the parents of dropouts are reported to have been favorable to continued school attendance by these pupils. The pattern of parental attitude shows slightly higher proportions of parents of girl dropouts supporting continued school attendance than is noted for boys. Parents of Negro dropouts indicated support for school attendance in higher proportions than was observed for white dropouts. The proportion of parents favoring school attendance drops sharply between the dropouts having average and dropouts having low potential for school success. It appears that many parents have adopted a point of view that the secondary school has very little to offer pupils with below average ability.

Education Completed by Parents

The level of education completed by parents may influence the degree to which continued school attendance is encouraged and may indicate the extent to which home surroundings may be conducive to satisfactory school achievement (materials for study, level of intellectual stimulation, belief in importance of education, ability to assist in learning problems, etc.) Table 21 contains a summary of the educational attainment of parents of school dropouts grouped by level of estimated scholastic ability.

Table 21

PER CENT OF PARENTS OF SCHOOL DROPOUTS COMPLETING VARIOUS LEVELS OF EDUCATION, BY SEX, RACE, AND ABILITY

DROPOUTS BY ABILITY LEVEL	WHITE		NEGRO		Total
	Boys	Girls	Boys	Girls	
AVERAGE OR ABOVE ABILITY					
Father					
Did Not Attend School.....	1.7	1.7	2.8	0.0	1.7
Attended Elementary School...	28.4	33.2	34.0	38.1	32.1
Completed Elementary School..	19.9	19.3	21.5	24.1	20.2
Attended High School.....	25.1	23.9	27.3	27.6	24.6
Completed High School.....	17.0	17.0	12.6	8.1	15.7
Attended College or Higher.....	7.9	4.9	1.8	2.1	5.7
Mother					
Did Not Attend School.....	1.5	1.5	2.5	0.0	1.5
Attended Elementary School...	23.0	26.2	28.7	29.2	25.5
Completed Elementary School..	16.6	19.3	20.9	21.4	17.9
Attended High School.....	29.3	29.4	30.6	38.0	29.6
Completed High School.....	23.6	19.6	14.5	9.9	19.5
Attended College or Higher....	6.0	4.0	2.8	1.5	6.0
BELOW AVERAGE ABILITY					
Father					
Did Not Attend School.....	1.3	1.8	2.1	1.6	1.7
Attended Elementary School....	47.8	52.1	50.9	48.0	45.4
Completed Elementary School..	20.2	19.4	21.5	23.5	19.1
Attended High School.....	20.2	18.2	18.9	20.7	20.7
Completed High School.....	9.3	7.0	5.2	5.6	9.9
Attended College or Higher....	1.2	1.5	1.4	.6	3.2
Mother					
Did Not Attend School.....	1.0	1.3	1.5	1.0	1.3
Attended Elementary School....	39.5	44.6	41.0	45.3	38.6
Completed Elementary School..	20.8	20.0	22.1	19.1	19.7
Attended High School.....	24.8	24.2	27.9	28.8	26.5
Completed High School.....	12.5	8.5	6.7	5.4	11.5
Attended College or Higher.....	1.4	1.4	.8	.4	2.4

The pattern of educational attainment of parents of school dropouts is similar among the sex-race-ability subgroupings. Mothers, particularly those of boy dropouts, appear to have completed a slightly higher level of education than did the fathers. Higher proportions of parents have completed high school or higher levels in the grouping of dropouts having average or above average ability than is observed in the low ability group.

At both levels of ability the median level of education attained by parents of white girl dropouts is slightly lower than that of parents of boy dropouts. This difference in median levels is not noted among parents of Negro dropouts.

The relationship of the pattern of educational attainment of parents of school dropouts to that estimated for all pupils was reviewed. The distribution of educational attainment of heads of Virginia families with children under 18 years of age as enumerated in the 1960 U. S. Census provides an estimate of the State pattern. The distributions of highest level of educational attainment of parents of dropouts and parents of all pupils are shown in Table 22.

Table 22

HIGHEST LEVEL OF EDUCATION COMPLETED BY PARENTS OF SCHOOL DROPOUTS AND OF HEADS OF FAMILIES HAVING CHILDREN UNDER 18 YEARS OF AGE, 1960

HIGHEST LEVEL OF SCHOOLING COMPLETED	PERCENTAGE		
	Head of Household Virginia Families With Own Children Under 18	Parents of Dropouts	
		Mother	Father
No Schooling or Attended Elementary School	31.4	34.6	41.4
Completed Elementary School	7.5*	19.0	19.6
Attended High School	19.0	28.0	22.4
Completed High School	21.5	15.0	12.4
Attended College	8.4	2.1	2.2
Completed College	12.2	1.3	2.0

*Attended 8th Grade.
SOURCE: *U. S. Census of Population, 1960;* Dropout Data Sheets.

Compared to statistics for all parents, a higher proportion of the parents of school dropouts appear to have ended their education in the elementary or high school. About 43 per cent of the heads of households having children under 18 years of age in 1960 completed high school or higher levels while only 18.2 per cent of the mothers of dropouts and only 16.3 per cent of the fathers of dropouts completed high school or higher levels of education.

The parents of school dropouts appear to have ended their formal education at a slightly lower level of educational attainment than that of parents of pupils who stay in school. This situation is about the same for Negro and white dropouts. It is estimated that 16.3 per cent of non-white heads of families with children under 18 years of age have completed high school or higher levels of education. Only 7.8 per cent of the fathers of Negro dropouts and only 8.6 per cent of the mothers of Negro dropouts are reported to have completed high school or higher levels of education.

Occupation of Parents

The occupation codes indicated for the parents of dropouts were summarized by major classifications. The occupation distributions of parents of dropouts and the estimated proportions of the Virginia population of heads of households having children under 18 years of age are listed in Table 23.

Table 23

OCCUPATIONAL CLASSIFICATION OF ALL FAMILIES WITH OWN CHILDREN UNDER 18 AND FATHERS OF SCHOOL DROPOUTS

OCCUPATION CLASSIFICATION	Per Cent of Families With Employed Civilian Head and Own Children Under 18	Per Cent of Fathers of Pupils Dropping Out of School
Professional, Technical, and Kindred	12.1	4.9
Managers, Proprietors, and Officials	11.6	
Clerical, Sales, and Kindred	13.8	6.2
Craftsmen, Foremen and Kindred (Skilled)	21.9	32.8
Operatives (Semi-Skilled)	20.8	23.8
Service Workers	5.8	10.5
Laborers (Unskilled)	6.6	6.1
Farmers	5.2	15.7
Farm Laborers	2.2	
Not Reported	*	†

*Data were not reported for 12,762 families, about 3 per cent.
†Item was not reported in 3,456 data sheets, 27 per cent.
SOURCE: *U. S. Census of Population, 1960*, Table 112, Chapter D, Virginia, and Pupil Dropout Data Sheets.

It appears that larger than proportional numbers of fathers of dropouts are employed in the classifications of skilled, semi-skilled, and agriculture-related occupations. The classifications are not precisely comparable due to differences between the classification systems used in the two surveys and difficulties in coordinating the decisions of counselors in selecting the most appropriate codes for many occupations.

The occupation code for the father was not completed in usable form in 27 per cent of the data sheets. The occupation code for the mother was not completed in usable form in 64 per cent of the data sheets. It may be assumed that some parents are employed whose occupational categories are not reported in the dropout data sheets.

It appears, therefore, that at least 36 per cent of the mothers of dropouts are employed. The 1960 U. S. Census data for Virginia disclose that 32 per cent of all married women were in the labor force and in only 23.9 per cent of families with children under 18 years of age were both the head of the family and wife in the labor force. Therefore, it appears that a higher proportion of dropouts come from homes in which both parents are employed than is estimated for all pupils.

Marital Status of Parents

Summarized in Table 24 are the distributions of marital status reported for parents of school dropouts and the marital status of heads of families in Virginia in 1960 in which children under 18 years of age were present.

Table 24

MARITAL STATUS OF PARENTS OF DROPOUTS AND OF HEADS OF FAMILIES WITH CHILDREN UNDER 18 YEARS OF AGE IN VIRGINIA, 1960

Marital Status	Per Cent of Parents of Dropouts		Per Cent of Virginia Families With Children	
	White	Negro	White	Negro
Living Together	76.0	60.9	91.0	80.9
Separated	5.6	21.8	4.1	10.0
Divorced	7.9	3.6	1.4	1.7
Widow	7.7	8.4	2.2	4.3
Widower	1.7	3.1	.3	.8
Both Deceased	.9	1.9	....	....
Other	.2	.3	1.0	2.3
Total	100.0	100.0	100.0	100.0

The homes of the majority of dropouts contain both parents. However, the percentage of "broken" homes appears to be much higher for dropouts than is estimated for all pupils. A difference is noted between the races in the pattern of marital status of parents with a higher proportion of non-white families in "broken" homes. The distributions of dropouts and parents appear to be similar for each race.

CHARACTERISTICS OF PUPILS DROPPING OUT DURING THE SUMMER OF 1963

Data sheets were received from 302 secondary schools which reported 3,664 students enrolled in school in session 1962-1963 who did not enroll as expected at the beginning of session 1963-1964. These 3,664 dropouts constituted 1.75 per cent of the 1962-1963 enrollment of the schools in which they were last enrolled. Applying this percentage to the total end-of-year secondary school enrollment provides an estimate of 5,342 pupils dropping out of secondary schools in Virginia during the summer of 1963. It is likely that this figure is a minimum estimate of the number of persons dropping out during the summer since the reporting schools probably did not submit a data form for each dropout, a condition similar to that observed for dropouts during the session.

The dropout rate of approximately 5.0 per cent of the enrollment during the session and an additional 1.75 per cent during the summer appears to support the evidence of low school holding power provided by enrollment data. The percentage of the eighth grade enrollment of 1958-1959 represented by the twelfth grade enrollment in 1962-1963 is 60.58. This indicates a loss of 39.42 per cent of the eighth grade enrollment during the five-year period. The average loss of approximately seven per cent of enrollment each year is consistent with the estimate of the dropout rate provided by enrollment data.

An assumption was made that the 304 schools from which summer dropout data forms were received are a representative sampling of all Virginia secondary schools. The acceptability of this assumption was tested by reviewing the enrollment characteristics of the schools not reporting as compared with all secondary schools in the State. The distributions of enrollment of schools not reporting their summer dropouts and of all secondary schools in Virginia are shown in Table 25.

Table 25

DISTRIBUTION BY ENROLLMENT OF VIRGINIA SECONDARY SCHOOLS AND OF SECONDARY SCHOOLS NOT REPORTING PUPILS DROPPING OUT DURING THE SUMMER OF 1963

ENROLLMENT RANGE	NUMBER OF SECONDARY SCHOOLS	
	In Virginia	Not Reporting
1401 or larger	61	15
1101–1400	40	10
801–1100	50	11
601–800	59	19
401–600	70	23
301–400	50	16
201–300	64	30
151–200	21	12
101–150	28	17
76–100	13	6
75 or smaller	30	23
Total	486	182

The number of schools reporting and not reporting their summer dropouts is not proportional at each level of school size. There is a distinct pattern of schools smaller than 300 enrollment not reporting their dropouts as compared with the reporting pattern among the secondary schools of larger size. The characteristics, therefore, of summer dropouts may be weighted somewhat toward those who most recently enrolled in large high schools.

Grade of Last Enrollment of Summer Dropouts

Table 26 contains the percentage distributions of the grade in which summer dropouts were enrolled during session 1962-1963. As noted among dropouts leaving during the session, the last grade placement of the largest number of boys is grade 8 and the largest number of girls leave following enrollment in grade 9. The grade distributions of white and non-white summer dropouts are very similar except that slightly higher proportions of Negro boys leave at grades 8 and 9 than is noted among white boys.

Table 26

PERCENTAGE DISTRIBUTION OF SUMMER DROPOUTS BY SEX, RACE, AND GRADE OF LAST ENROLLMENT

GRADE	BOYS		GIRLS		Total
	White	Negro	White	Negro	
7	5.1	4.9	3.8	3.4	4.3
8	34.1	33.0	20.9	23.3	27.1
9	23.9	30.4	27.7	27.0	26.7
10	18.2	16.7	25.0	25.6	21.8
11	13.2	12.3	19.9	19.0	16.6
12	5.5	2.7	2.7	1.7	3.5

Age of Summer Dropouts

Summarized in Table 27 are the age distributions of pupils dropping out during the summer of 1963. The largest number of boys had achieved age 17 while most girls were 16 years of age. As noted among dropouts leaving during the session, girl dropouts tend to leave at an earlier age than boy dropouts. As a group the summer dropouts are slightly older than are those who left during the school year.

Table 27

PERCENTAGE DISTRIBUTION OF SUMMER DROPOUTS BY AGE AND SEX

AGE	Boys	Girls
14 or Less	3.4	5.4
15	8.6	13.7
16	25.2	34.3
17	28.5	24.9
18	20.2	15.1
19	9.6	4.4
20 or More	4.5	2.2
Total Reported	100.0	100.0

Scholastic Ability of Summer Dropouts

The distributions of intelligence quotients reported for summer dropouts, by sex and race, are shown in Table 28. As noted among the pupils dropping out during the session, intelligence information was not reported for more than one-third of the summer dropouts.

Table 28

PERCENTAGE DISTRIBUTION OF INTELLIGENCE REPORTED FOR SUMMER DROPOUTS, BY SEX AND RACE

RANGE OF INTELLIGENCE QUOTIENT	BOYS		GIRLS		Total
	White	Negro	White	Negro	
Below 60	2.1	5.9	1.1	3.2	2.2
60–69	4.9	10.4	4.3	12.0	6.2
70–79	17.1	31.3	13.4	28.1	18.5
80–89	30.1	26.4	26.7	28.1	28.0
90–99	25.3	17.5	28.9	19.2	25.2
100–109	14.9	5.2	17.7	7.7	14.2
110–119	3.6	2.2	6.5	1.4	4.4
120–129	1.0	1.1	1.0	...	.9
130–139	.4	...	.2	.3	.2
140 and Above	.6	...	.2	...	.2

The median of the reported intelligence quotients of summer dropouts is slightly lower than that observed among dropouts during the school year. Girl dropouts tend to have higher intelligence test scores than boys and Negro dropouts tend to have lower scores than white dropouts. About 45 per cent of the summer dropouts for whom intelligence is reported have ability reported in the average or above-average levels. More than eight per cent of the summer dropouts have ability within the range usually assigned to special education.

Achievement of Summer Dropouts

The number of elementary school grades in which summer dropouts had been retained is summarized in Table 29. As noted among those leaving during the school session, girl dropouts have had better school success than boys.

Table 29

PERCENTAGE DISTRIBUTION BY SEX AND RACE AND THE NUMBER OF YEARS SUMMER DROPOUTS WERE RETAINED BEFORE ENTERING EIGHTH GRADE

NUMBER OF RETENTIONS	BOYS		GIRLS		Total
	White	Negro	White	Negro	
None	37.3	37.0	58.2	56.2	48.4
1	31.2	32.9	26.6	24.9	28.6
2	20.6	21.0	11.3	12.3	15.7
3	7.7	5.5	2.7	4.4	5.0
4	2.2	2.2	.6	1.8	1.5
More than 4	1.0	1.4	.6	.4	.8

Almost half of the summer dropouts are reported not to have been retained in any grade and more than three-fourths have not been retained more than once. The pattern of number of grades in which they were retained are different for boy and girl dropouts with little race-related differences noted within each sex grouping.

The end-of-year course status of summer dropouts is shown in Table 30. As noted in the number of grades in which they have been retained, boy dropouts are not performing as successfully in school as are girls.

Table 30

PERCENTAGE DISTRIBUTION OF SUMMER DROPOUTS BY SEX AND RACE AND THE NUMBER OF SUBJECTS FAILED DURING 1962-1963 SESSION

NUMBER OF SUBJECTS FAILED	BOYS		GIRLS		Total
	White	Negro	White	Negro	
None	18.5	15.8	39.0	37.0	29.1
1	17.2	12.4	19.5	18.6	17.7
2	19.8	17.4	13.3	16.4	16.4
3	18.2	15.3	12.6	10.2	14.4
4	15.3	18.3	8.1	7.8	11.7
5	9.0	17.4	6.4	8.7	9.0
6	2.0	3.4	1.1	1.3	1.7

About one-third or less of the white and Negro boys were achieving satisfactorily while more than one-half of the girls were not failing more than one subject. Again, the sex-related characteristics are more marked than those related to race with the achievement status of Negro summer dropouts only slightly lower than among white dropouts.

Participation in School Activities by Summer Dropouts

About 33 per cent (32.9 per cent) of the summer dropouts are reported to have been participants in the student activities program of their schools. A slightly higher proportion of girls than boys are reported to have been participants. About 29.5 per cent of both white and Negro boys are reported to have participated in out-of-class school activities while the percentages for white and Negro girls are 32.6 and 43.0 per cent, respectively. The record of participation in school activities by summer dropouts is slightly higher than that noted among the pupils who dropped out during the school session.

Reasons for Withdrawal of Summer Dropouts

The reasons cited for withdrawal probably are not as accurate for summer dropouts as for those leaving during the session since it was not possible for the schools to conduct terminal interviews during the summer months. The distribution of summer dropouts by primary reason for withdrawal are shown for boys and girls in Table 31.

Table 31

PERCENTAGE DISTRIBUTION OF SUMMER DROPOUTS BY SEX AND BY PRIMARY REASONS FOR DROPPING OUT AS INDICATED BY COUNSELORS

REASON FOR LEAVING	Boys	Girls	Total
Subject Difficulties	47.2	26.6	36.0
Marriage	3.3	40.9	23.7
Parental Indifference	10.5	10.2	10.4
Influence of Out-of-School Associates	8.5	5.4	6.9
To Seek Employment	9.9	3.6	6.5
Health Problems	1.7	5.9	4.0
Financial Difficulties in the Home	4.4	3.0	3.6
Reading Difficulties	5.4	1.9	3.5
Military Service	6.2	.1	2.9
Prolonged Absence from School	2.9	2.4	2.5

As noted among dropouts leaving during the school session the primary reason for withdrawal stated for boy dropouts is subject difficulties, a reason which is second most prevalent among girl dropouts. Marriage is cited as the primary reason for leaving school for the largest number of girls. About 10 per cent of both boys and girls are influenced toward withdrawal by the lack of parental support for continued school attendance. Third- and fourth-place primary reasons for withdrawal by boys are employment and military service. Fourth- and fifth-place reasons for withdrawal by girls are health problems and the influence of out-of-school associates. The summer dropouts appear to withdraw from school for about the same reasons as do those who leave school during the regular session.

Attitude of Parents of Summer Dropouts

The parents of only 50.9 per cent of the summer dropouts are reported to have favored continued school attendance of these pupils. Fewer than half, 46 per cent, of the parents of white dropouts were reported to have favored continued school attendance. A favorable parental attitude was reported for a slightly higher proportion of girl than of boy summer dropouts—49.5 and 52.2 per cent, respectively.

Highest Level of Education Completed by Parents of Summer Dropouts

Table 32 contains the per cent of fathers and mothers of summer dropouts who terminated their formal education at various levels. About half of the fathers and about two-fifths of the mothers did not complete elementary school.

Table 32

PERCENTAGE DISTRIBUTION BY SEX, RACE AND LEVEL OF EDUCATION COMPLETED BY PARENTS OF SUMMER DROPOUTS

Highest Level of Education Attained	Boys		Girls		Total
	White	Negro	White	Negro	
FATHER					
Did Not Attend School	1.5	.3	2.3	.5	1.5
Attended Elementary School	43.6	61.6	47.2	55.8	49.0
Completed Elementary School	20.1	17.2	19.1	22.0	19.7
Attended High School	20.1	13.7	19.5	15.4	18.4
Completed High School	10.1	5.9	8.7	5.1	8.3
Beyond High School	4.6	1.3	3.2	1.2	3.1
MOTHER					
Did Not Attend School	1.3	.2	1.5	.2	1.0
Attended Elementary School	36.5	49.6	38.1	46.6	41.0
Completed Elementary School	19.3	19.9	20.4	21.4	20.5
Attended High School	25.2	18.4	25.1	23.7	24.4
Completed High School	14.3	9.9	12.0	7.7	12.0
Beyond High School	3.4	2.0	2.9	.4	1.1

Only 12 per cent of the fathers and 13 per cent of the mothers of summer dropouts had completed high school or higher levels of education. Parents of white summer dropouts have attained a slightly higher level of education than attained by parents of Negro dropouts. The median level of education completed by mothers is slightly above the median for fathers, particularly among the white summer dropouts.

Sex and Race of Summer Dropouts

As was noted among those who dropped out during session 1962-1963, the summer dropout rate of pupils in Negro schools appears to be higher than that of pupils attending white schools.

The rate of reported dropping out during the summer is significantly higher for Negro boys and girls than for white boys and girls. Reported summer dropouts constitute 1.2 per cent of the total secondary school enrollment of session 1962-1963. The reported white summer dropouts represent 1.1 per cent and the Negro summer dropouts represent 1.6 per cent of the enrollment of their respective race in session 1962-1963.

Contrary to the pattern observed during the 1962-1963 session, the summer dropout rate is higher for girls than for boys. This change is attributable largely to the pattern among white pupils.

III. CHARACTERISTICS OF SECONDARY SCHOOLS RELATED TO SCHOOL HOLDING POWER

Effective planning for improving the level of school holding power may involve modification of several characteristics of secondary schools. Reviewed in this section is an investigation of the possibility of relationships between selected characteristics of secondary schools and the degree of school holding power. Basic information for this analysis was obtained from the Preliminary Annual High School Report and the Final Annual High School Report which are submitted by each secondary school in Virginia. Data cards were prepared which contained selected information about the size of the school, the scope of offering, the estimated instructional cost per pupil, adequacy of supporting facilities and services, and the type of community in which the school is located.

Where appropriate, the seventh-grade enrollment and the number of seventh-grade dropouts were subtracted from the school totals and a revised dropout rate was calculated. This procedure made the school dropout rates roughly comparable since all computations are based upon the dropout conditions in grades 8-12. Since the number of pupils dropping out during the summer is not included in the calculations, the reported dropout rates do not provide a precise indicator of school holding power.

The percentage of the total school enrollment represented by the dropouts ranged from zero to 17.0 per cent. The mean dropout rate was 4.9 per cent. The school data cards were sorted into ascending order of dropout percentage and schools within the upper and lower 27 per cent of the distribution were selected for comparative studies of the groups of schools which are most different in their dropout rates.

To permit investigation of the relationship between selected socio-economic conditions surrounding the school and the level of school holding power, the rank was calculated on three factors for each of the political subdivisions in the State. These included the following characteristics of Virginia counties and cities as determined in the 1960 U. S. Census: (1) Percentage of persons age 14-17 years enrolled in school in 1960; (2) median school years completed by persons age 25 years and over; (3) percentage of persons living in rural farm locations.

The following sections review the investigations of the relationship between these school and community factors and the level of school holding power.

Race of School

Table 33 contains the number of selected white and Negro secondary schools having high or low dropout rates

Table 33

NUMBER OF SCHOOLS HAVING HIGH OR LOW DROPOUT RATES, BY RACE

RACE	Dropout Rate		
	Low	High	Total
White	110	80	190
Negro	21	51	72
Total	131	131	262

Independence of the preceding variables was investigated. The outcome supports a conclusion that there is a relationship between the race classification of a school and the dropout rate. As may have been predicted from the observed higher dropout rate among Negro pupils, larger than proportional numbers of Negro schools are classified in the high dropout rate group.

It was proposed that the level of education achieved by adults age 25 and above may be a condition which is related to the rate of school holding power. The schools having high and low dropout rates were grouped on the basis of the rank of their political subdivisions in the median level of education completed by persons age 25 and above as reported in the 1960 U. S. Census. The high and low groupings of school divisions contained those which ranked in the upper and lower 27 per cent, respectively, of all political subdivisions. The distribution of secondary schools by dropout rate and by rank of the school division in median school years completed by persons age 25 and above is given in Table 34.

Table 34

DISTRIBUTION OF SCHOOLS HAVING HIGH AND LOW HOLDING POWER BY RANK OF SCHOOL DIVISIONS IN MEDIAN SCHOOL YEARS COMPLETED BY PERSONS AGE 25 AND ABOVE

RANK IN MEDIAN SCHOOL YEARS COMPLETED	Dropout Rate		
	Low	High	Total
High	65	29	94
Average	36	49	85
Low	30	53	83
Total	131	131	262

The distribution of schools is not within the range to be expected if there were no relationship between these conditions. This finding suggests that the dropout rate of a school is related to the median level of school years completed in the political subdivision in which the school is located. The relationship is in the direction of higher school holding power in communities in which high median levels of educational attainment are observed among the population.

Per Cent of Persons 14-17 Years of Age in School

The secondary schools having high and low rates of school holding power were distributed on the basis of the rank of the political subdivision in the proportion of persons age 14-17 years of age enrolled in school in 1960. The number of schools observed in each of the groups is indicated in Table 35.

Table 35

DISTRIBUTION OF SCHOOLS HAVING HIGH AND LOW DROPOUT RATES BY RANK OF POLITICAL SUBDIVISION IN PROPORTION OF PERSONS AGE 14-17 ENROLLED IN SCHOOL

RANK IN PROPORTION ENROLLED IN SCHOOL	Dropout Rate		
	Low	High	Total
High	63	17	80
Average	38	77	115
Low	30	37	67
Total	131	131	262

The distribution of schools is not within the range to be expected if there were no relationship between these conditions. The rank of the school division in percentage of the school age population enrolled appears to be related to the level of school holding power. Political subdivisions in which high proportions of pupils are enrolled in school have a large number of schools having high holding power.

Per Cent of Population Classified as Rural Farm

The schools having high and low rates of school dropouts were distributed on the basis of rank of their political subdivisions in the percentage of population living in areas designated as rural farm. The distributions are summarized in Table 36.

Table 36

DISTRIBUTION OF SCHOOLS HAVING HIGH AND LOW DROPOUT RATES BY RANK OF POLITICAL SUBDIVISION IN PERCENTAGE OF RURAL FARM POPULATION

RANK IN RURAL FARM POPULATION	Dropout Rate		
	Low	High	Total
Low	62	28	90
Average	43	62	105
High	26	41	67
Total	131	131	262

The distribution of schools is not within the range to be expected if there were no relationship between these conditions. This finding suggests that the rank of the political subdivision in the proportion of population living on farms is related to the level of school holding power. Political subdivisions having low proportions of population located on farms have more than a proportional number of schools having high holding power.

Grades Included in the Secondary School

The schools having high and low rates of pupil dropouts were distributed on the basis of whether or not the schools contained the three upper grade levels of secondary education. The distributions of schools by dropout rate and grade levels included in the school organization are shown in Table 37.

Table 37

DISTRIBUTION OF SCHOOLS HAVING HIGH AND LOW DROPOUT RATES BY THE RANGE OF GRADE LEVELS INCLUDED IN THE SCHOOL ORGANIZATION

RANGE OF GRADE LEVELS	Dropout Rate		
	Low	High	Total
Grades 8-12	85	112	197
Grades 7-9	46	19	65
Total	131	131	262

Outcomes of the investigation support a conclusion that there is a relationship between the two variables in Table 37. This finding suggests that the dropout rate is different for predominantly junior high schools and schools enrolling pupils in at least the upper three grades. Larger than proportional numbers of senior high schools and/or smaller than proportional numbers of junior high schools are in the high dropout rate classification. This suggests that the characteristics of schools in the high and low dropout rate groups may be weighted somewhat by the disproportional number of junior high schools in the low dropout category. Therefore, schools were divided on the basis of the grade level ranges indicated in Table 35 for most accurate comparisons of characteristics of schools having high and low dropout rates. Since there is wide variation among the characteristics of the schools enrolling pupils in one or more of grades 7-9 due to differences in the number of grade levels contained, these schools were omitted from the investigations which follow.

Characteristics of Schools Having High and Low Pupil Dropout Rates

The regular or senior high schools having high or low levels of school dropout rates were compared using the responses of principals about selected school characteristics. Questions about characteristics which are reported to be present in all schools are as follows:

1. Is provision made for each pupil to receive required instruction in the use of library materials?
2. Are organized guidance services provided?
3. Are complete individual, permanent, and cumulative records kept for each pupil and in such form that they may be conveniently used?
4. Is there in use a sound system of budgeting, accounting, and auditing of all school funds?
5. Is occupational, educational, and personal adjustment information available?

Schools having high and low levels of school holding power appear to have wider variation in the presence of other selected characteristics. In all comparisons, however, the distribution of schools indicating presence of each of the following characteristics was within the range of variations to be expected from samples drawn from schools in which the condition and the level of dropout rate are independent.

1. Are any teachers of academic subjects teaching more than 750 pupil-periods per week?
2. Is the library adequately equipped to meet the needs of the instructional program?
3. Are adequately equipped laboratories provided to meet the needs of instruction in all science courses offered?
4. Are the facilities and equipment adequate for the instructional program in health and physical education?
5. Are adequate facilities and equipment provided for instruction offered in: Home economics, industrial arts?
6. Are teachers assigned only those subjects which they are certificated to teach?
7. Is the librarian certificated in library science?
8. Do staff members designated as guidance counselors meet the specified requirements in guidance?

Selected quantitative characteristics of the secondary schools having high and low dropout rates were compared. The areas investigated, the mean scores, and the outcomes of the investigations are summarized in Table 38.

Table 38

SUMMARY OF COMPARISONS OF SELECTED CHARACTERISTICS OF HIGH SCHOOLS HAVING HIGH AND LOW DROPOUT RATES

CHARACTERISTIC	LOW DROPOUT RATE		HIGH DROPOUT RATE	
	Number	Mean	Number	Mean
Total Enrollment	85	636.60	112	646.04
Instructional Cost Per Pupil*	85	$306.58*	112	$263.60
Pupil Teacher Ratio*	85	17.77*	112	20.80
Total Units Offered	85	48.68	111	45.32
Academic Units Offered	85	27.33	111	24.64
Fine Arts Units Offered	72	5.22	102	4.08
Practical Arts Unit Offered	83	16.48	110	16.89

*Statistically Significant, Alpha = .02.

In only two areas—per capita cost of instruction and pupil-teacher ratio—are the differences in mean scores greater than those expected from random samples drawn from school populations having equal means. Schools having low dropout rates spend significantly larger amounts for the education of pupils and provide a significantly lower pupil-teacher ratio. The enrollment and offering data may not be directly comparable due to some differences in the range of grade levels in the high schools included in the study.

Since the influence of out-of-school conditions may be greater than some of the characteristics of schools identified as high and low in holding power, the influence of community conditions was reduced. This was accomplished by selecting the schools for each race having high and low holding power and located within political subdivisions in the upper or lower range of the three previously identified socio-economic characteristics of political subdivisions.

This procedure resulted in the identification of a limited number of schools of each race. The number of schools and the mean scores of these schools in selected quantitative characteristics are reviewed in Table 39.

Table 39

SELECTED CHARACTERISTICS OF SCHOOLS HAVING HIGH AND LOW DROPOUT RATES AND LOCATED IN POLITICAL SUBDIVISIONS HAVING CONDITIONS BELIEVED TO BE CONDUCIVE TO HIGH OR LOW DROPOUT RATES

School Characteristic	Socio-Economic Conditions Suggest Low Dropout Rate				Socio-Economic Conditions Suggest High Dropout Rate			
	Low Dropout Rate		High Dropout Rate		Low Dropout Rate		High Dropout Rate	
	No.	Mean	No.	Mean	No.	Mean	No.	Mean
Total Enrollment								
White Schools	20	1,501.00*	2	701.50	11	217.45	11	323.27
Negro Schools	3	149.67	3	812.67	..	.....	..	.....
Instructional Cost Per Pupil								
White Schools	20	$338.75	2	$349.00	11	$294.36	11	$259.45
Negro Schools	3	361.00	3	343.67	..	.....	..	.....
Pupil Teacher Ratio								
White Schools	20	19.00	2	18.50	11	16.09	11	20.00
Negro Schools	3	16.00	3	20.00	..	.....	..	.....
Total Units Offered								
White Schools	20	69.60	2	60.00	11	38.64	11	38.09
Negro Schools	3	34.34*	3	60.00	..	.....	..	.....
Academic Units								
White Schools	20	37.65	2	26.00	11	22.73	11	22.00
Negro Schools	3	20.34	3	28.00	..	.....	..	.....
Fine Arts Units								
White Schools	20	10.25*	2	4.50	11	1.00	11	2.18
Negro Schools	3	3.67	3	6.00	..	.....	..	.....
Practical Arts Units								
White Schools	20	20.80	2	26.00	11	13.55	11	12.64
Negro Schools	3	10.67	3	26.00	..	.....	..	.....

*Statistically Significant, Alpha = .02.

Limitations in the number of schools increase the probability that the outcomes of these investigations are attributable to deficiencies in the sampling rather than basic differences in the characteristics of schools. Schools in low dropout probability areas enrolling white pupils differ significantly in enrollment with a corresponding significant difference in the number of fine arts units offered. Each comparison suggests that schools having low dropout rates are larger than schools having high dropout rates.

The statistically significant difference among Negro schools located in areas in which socio-economic conditions suggest a low dropout rate shows low dropout schools having the smaller total number of units offered. With only three schools in each group, there is a strong likelihood that the characteristics of schools having high and low dropout rates are not being represented by adequate samples. The possibility of sampling errors outweighs any other interpretations of this apparent difference.

The responses of principals did not vary widely regarding the presence or absence of the school services and facilities studied. Therefore, these school characteristics were not evaluated statistically.

The outcomes of these comparisons suggest that none of the school characteristics, per se, relates directly to school holding power. The observed differences and the statistically significant differences among the schools involved in these samples indicate need for additional investigation of the characteristics of schools which may relate to high and low dropout rates. Variables about the proportion of pupils who are leaving during summer months, not encouraged to enroll, dropping out but reentering another school, etc., need to be more accurately controlled. The socio-economic setting of individual schools rather than that of the division in which the school is located needs to be considered. The influence of grade and scholastic ability characteristics of school dropouts needs to be controlled.

The school dropout rate differs widely among the secondary schools of Virginia. Investigation of the relationship between the dropout rate and selected characteristics of the educational setting suggests that school holding power is influenced by the socio-economic conditions surrounding the school more than by characteristics of the program being provided by the school. Location in areas in which there is low support for school attendance as shown by the median level of education completed by the adult population and the percentage of school-age population enrolled in school in 1960 may be an influence upon school holding power which is difficult to offset by many characteristics of a good school program. This outcome supports local school actions which emphasize the motivation of students for school attendance rather than working toward extensive modification of the school program.

IV. RECOMMENDATIONS FOR IMPROVING SCHOOL HOLDING POWER

The characteristics of secondary school dropouts in Virginia are very similar to those observed in the many studies of school dropouts throughout the nation. As summarized by the NEA Research Division, the following are general characteristics usually observed among school dropouts:

"(a) fairly consistent regression in scholarship from elementary to senior high school
(b) increasing absences from elementary to senior high school
(c) frequent grade and subject failures on all levels
(d) marked lack of interest in school work, and
(e) frequent transfers from school to school."[1]

Studies suggest there is no single configuration of characteristics which is descriptive of all school dropouts. Reported in the NEA Research Division summary is a study by Livingston in which the combination of characteristics correlated most highly with dropping out are "low participation in formal and informal school activities, number of grades detained, and status of persons with whom the pupil lived."[2]

Outcomes of the Virginia study which have not been published in many other studies suggest: (1) a sex-related difference in the motivation of many dropouts to leave secondary school, (2) a tendency for secondary schools to lose through dropouts an almost equal proportion of the enrollment at each grade level, (3) considerable similarity in the characteristics of white and Negro dropouts, and (4) a relationship between school holding power and selected characteristics of the school community.

The findings of the study of Virginia high school dropouts suggest a need for continued school improvement throughout the State. The sections which follow contain suggestions to schools as they plan for improved provisions for potential dropouts. The recommendations include four levels of action at the local school level: investigate local conditions, review school standards, improve pupil personnel services, and experiment with program modifications.

Recommendation A: **Investigate Local Conditions**

Characteristics of school dropouts in many local schools are not identical to the pattern observed among dropouts throughout Virginia. While many of the conditions identified at the State level may be operative in a school, the relative importance of various motivational conditions varies widely among individual schools. Local studies which have been prepared or reviewed by the Division of Educational Research reveal marked differences among various school divisions in characteristics of dropouts and reasons for dropping out of school.

A review of the local school dropout rate, characteristics of pupils leaving school before graduation, and home and community conditions surrounding the school provides valuable information for local planning. Increased emphasis upon information available from terminal interviews should provide direction to planning for school improvements.

Recommendation B: **Review School Standards**

The public schools of Virginia accept a basic responsibility for education of youth in the State. During recent years the secondary schools have been enrolling and holding an increasing proportion of pupils having levels of educational potential who, a few years ago, would not have been expected to complete more than three or four grade levels.

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[1] NEA Research Division, *School Dropouts*, April, 1963, p. 11.
[2] NEA, op. cit., p. 12.

The purposes of public secondary education need to be reviewed at the local level. The school must arrive at a decision about its responsibility for educating each youth of secondary school age. Questions such as the following need to be answered: Shall the school provide only academic instruction or shall it give attention to other instructional content which will prepare youth for success in "life, living, and livelihood"? Shall the secondary school accept the responsibility for imposing or developing a concept among all pupils that education is the key to success in life? Shall the secondary school provide continuing learning programs for pupils whose limitations in scholastic ability suggest that mastery of typical scholastic content of secondary school levels is very unlikely? Shall the secondary school either provide or take responsibility for referral of pupils to the specialized services needed to release the educational potential of persons having social, emotional, or psychological difficulties?

It may be assumed that secondary schools in Virginia answer these questions with, at least, a qualified affirmative. If satisfactory completion by pupils of the school program being provided for them is used as a criterion of success there appears to be evidence that the secondary schools are not as successful as the elementary schools. The success of schools in developing desired achievement in all pupils varies among the grade levels. Table 40 contains the percentage of the end-of-year membership in each grade level retained in their grade at the end of session 1962-1963.

Table 40

PERCENTAGE OF END-OF-YEAR MEMBERSHIP RETAINED AT EACH GRADE LEVEL, SESSION 1962-1963

GRADE	PERCENTAGE BEING RETAINED	
	White	Negro
1	10.1	18.7
2	6.5	12.3
3	6.4	10.9
4	6.1	9.3
5	5.9	8.8
6	5.3	7.3
7	7.0	8.5
8	11.8	17.5
9	10.7	14.8
10	8.9	11.9
11	7.6	9.7
12	5.6	5.0

Percentage based upon the total of promotions and retentions.

The schools of Virginia show evidences of lowest success at three grade levels of instruction: Grades 1, 8, and 9. The pattern of school grade retentions shows a peak in percentage of pupils being retained in their grade at these levels. The occurrence of the highest dropout rates also noted in these grades, and subject difficulties being identified most frequently as the primary cause of dropping out suggest that a major discrepancy exists at these grade levels between school objectives and school practices. With the exception of grade one, where the philosophy underlying grade retention is considerably different from that of the upper grade levels, the highest rates of grade retention are observed in the first four years of the five-year high schools for white and Negro pupils.

The retention rates for Negro pupils are much higher than those observed among white pupils. This condition, supported by the observance of subject difficulties among most dropouts, gives some explanation for the observed differential dropout rates of Negro and white pupils.

Reduction of the grade 8 and 9 barrier to continued success for many pupils may require modification of the existing objectives, offerings, instructional practices, and/or school standards. Many schools may not have broad enough course offerings to allow successful growth experiences for pupils having relatively low scholastic potential. Secondary school personnel may be excessively conscious of a "normally distributed curve" in their grading practices with the result that unsatisfactory marks are assigned to a higher proportion of pupils having low scholastic potential than is noted in the elementary school grades. The typical secondary school standards of academic content and scholastic achievement may not be appropriate for pupils who have limited capacity and for whom it may be realistic to expect limited application of academic learnings in their future endeavors.

Recommendation C: **Improve Pupil Personnel Services**

There appears to be evidence that schools do not know as much as they should about the intellectual characteristics, home conditions, and problems of pupils who leave school prior to graduation. Summarized in Table 41 are the percentages of the dropout data sheets having blank or unusable information in selected areas.

Table 41

PERCENTAGE OF DROPOUT DATA SHEETS LEFT BLANK OR COMPLETED INCORRECTLY IN THE INDICATED AREAS OF INFORMATION

AREA OF INFORMATION	PERCENTAGE OF DATA SHEETS BLANK OR INCOMPLETE
Iowa Silent Reading Test Percentile	38.0
California Language I.Q.	39.9
California, Total I.Q.	30.5
DAT Numerical Ability	42.9
DAT Verbal Ability	39.5
Number of Years Retained Before 8th Grade	23.8
Number of Subjects Failed During Session	10.8
Participation in School Sponsored Activities	12.9
Pupil's Reason for Dropping Out of School	2.9
Parental Attitude Toward School Attendance	7.4
Primary Occupation of Father	27.2
Educational Level of Father	16.7
Educational Level of Mother	21.7
Marital Status of Parents	4.1
In Whose Home Pupil Was Residing (Relationship to Pupil)	3.2

While it is probable that the absence of some of the requested information may be attributed to limitations in the dropout questionnaire and to mobility of the school population, the high percentages of data sheets with incomplete data provide an indication that schools may not be giving enough attention to the collection and use of information related to the scholastic potential and scholastic success of those pupils who have dropped out of school. Since the data forms were completed by guidance personnel—persons having the most direct access to school records—there appears to be considerable likelihood that classroom teachers have even less complete information needed for the most effective instruction of these potential school dropouts.

The absence of selected school-related information about a sizable proportion of school dropouts suggests need for improvement and enlargement of pupil personnel services. Increased attention needs to be given to obtaining and maintaining basic information which is required for complete understanding of the characteristics and difficulties of students, particularly those exhibiting characteristics of potential dropouts.

Increased attention appears to be needed in the sharing and interpretation of this information with teachers in order that their instructional practices may be better geared to the unique learning characteristics and educational needs of the pupils assigned to them. It is particularly appropriate for teachers of potential dropouts to share heavily in the guidance responsibility of the school. This responsibility includes establishment of a personal interest in the pupil, providing information about the requirements for success in an occupation, emphasising the importance of education for life success, providing referral to appropriate specialised personnel, and motivating learning without belittling the values held by the pupil.

Communication between the school and the homes of pupils needs to be improved. The school needs to be better aware of the type and direction of home influences. Parents and guardians exert considerable influence over pupil work habits, out-of-school activities, and motivation for school attendance. Persons responsible for the home life of pupils, particularly those pupils having characteristics of potential dropouts, may need assistance from the school. This assistance may include information about the pupil involved—the school's estimate of his scholastic potential, his achievement difficulties, occupational objectives which may be reasonable for him, his apparent interests, and problems he is encountering in school.

The school needs to be fully aware of the hopes and aspirations of the parent or guardian of the child. Through discussion of the possible future for the pupil as conceived by the parent and by the school it may be possible to arrive at a cooperative course of action which involves continued school attendance. While the school will be reluctant to accept a point of view that continued school attendance is not worthwhile, it should be fully aware of the reasoning which contributes to this belief among the parents. Through improved communication between the home and school, both institutions may work together more effectively in providing the educational experiences which will allow each pupil to develop to his maximum potential.

Increased attention appears to be needed in the areas of psychological and guidance services as well as enlargement of the existing visiting teacher service. Many dropouts appear to have difficulty in utilising their educational potential as a result of inadequate emotional and social adjustments. Increased attention to early identification, prompt referral to specialists, and continuing follow-up should result in improved school experiences for these pupils. Through use of the visiting teacher, increased coordination and direction may be realized in the use of school and community resources for improved school holding power.

Recommendation D: **Experiment With Program Modifications**

After study has given insight into the unique characteristics of the local problem, plans should be made to experiment with modifications in the school program to provide improved learning experiences for potential dropouts. A useful reference for local study is the recent publication of the National Education Association project on school dropouts entitled *The School Dropout.*

Several approaches to program modification have been identified in other studies of dropouts. Consideration may be given to the following as schools explore ways to improve their holding power through instructional and program modifications: increased scope of course offerings in vocation-related areas; more cooperative work-training programs; inauguration of new courses or special course sections designed for pupils having low ability; providing increased emphasis upon the attainment of basic skills; use of new instructional media and flexible organization to promote most effective learning for all pupils; increased attention to motivation of pupil learning by all teachers; enlargement of the pupil activity program to provide satisfying experiences for pupils who rank low in leadership potential, study skills, and scholastic ability; reduction of cost of the extra-curricular activities or elimination of those which are costly; increased emphasis upon development of the fundamental skills needed for successful work experience of pupils who are experiencing difficulty with regular school work; cooperative planning with local employers to develop programs which may be jointly offered as first-hand learning experiences about the importance of education; provision of alternate courses for those which have been failed by a pupil rather than allowing only a repetition of the same course content; increased emphasis throughout all classes toward satisfactory social experi-

ences of potential dropouts; increased emphasis throughout the faculty on knowing and showing interest in pupils as individuals; and modification of instructional approaches to include alternate learning experiences for pupils having low verbal ability.

Additional modifications in the school program which may be considered in planning to improve school holding power include: provision of vocational-oriented learning experiences at earlier grade levels and with greater flexibility than is generally practiced; increased use of the fine arts, crafts, music, and drama to enrich the school experience of all pupils and to provide opportunities for pupils having low scholastic potential to experience success in the manipulative skills; increased use of dramatics and speakers from community groups to develop awareness among pupils of the importance of continued school attendance; increased attention to planning an instructional program which is varied and interesting; providing motivation and instructional content based upon the impending adult concerns of employment, marriage, military service, and family responsibilities; and increased concern for the reduction of the possibility of bias by the teacher which may result in lowered achievement among pupils who lack motivation, scholastic ability, and/or exemplary learning behavior.

Selection of one or more of these courses of action should be based upon a consideration of the characteristics of the local school dropouts. The study of Virginia high school dropouts reveals no single set of characteristics which are common to all who leave school before graduation. The State study, as well as other studies, suggests there may be three or four types of personal characteristics which influence pupils to decide to leave school prior to graduation. These types include: (1) slow learners; (2) culturally and educationally disadvantaged; (3) culturally different or culturally non-motivated for school attendance; and (4) emotionally, physically, and psychologically handicapped. Many dropouts may exhibit characteristics of only one of these groupings and some may have characteristics which include more than one of these conditions. These basic characteristics are identified since they suggest different approaches to planning for improved school holding power. Local studies may reveal a predominance of dropouts exhibiting one or more of these characteristics which may provide the focal point for remedial action at the local school or school division level.

Program improvement for slow learners appears to be in greatest need among the Virginia secondary schools. Pupils having intelligence quotients estimated between 70 and 89 constitute almost half of the school dropouts for whom intelligence is reported. The traditional scholastic content, achievement expectations, and instructional practices utilized in secondary schools are not appropriate for these pupils.

The increasing sense of frustration and inability to perform the learning tasks satisfactorily leads many of the slow-learning secondary school dropouts to sever their relationship with the schools as soon as their age or parents will permit. Based upon an assumption that these pupils may be expected to achieve at three-fourths to nine-tenths of the rate of normal pupils, their achievement level and developmental level at the age-grade placement of grade 8 should be around grades 6 and 7. Frequently, adequate provision has not been made for modified learning programs in the earlier grades and the actual achievement level of these slow-learning pupils may be far lower than the level suggested by their ability. Programs for these pupils should have the best characteristics of instruction for pupils in the upper elementary grade levels with increased attention given to developing mastery of the basic communication skills which will be needed for effective participation in the working and living activities which will surround them after completion of school. It is appropriate to provide pre-vocational experiences in the exploration of occupations and vocations which may be open to these pupils. Increased use should be made of learning aids and a variety of instructional experiences should be provided. Provision should be made for successful completion of the learning program with a reasonable amount of effort by these pupils. The learning program should involve all school grade levels in order that graduation is a realistic objective for these pupils as well as those having average or higher levels of ability. An excellent resource book for local study in planning for improved school offerings for these pupils is *Education for the Slow Learners*, by G. Orville Johnson; Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1963.

The pupils who are culturally and/or educationally disadvantaged may appear to be slow learners due to the deprivation of many of the normal experiences which develop readiness for learning and provide a background for continued intellectual activity. Efforts by the schools may include provision of pre-school experiences to improve

the experience background of these pupils prior to the inauguration of the formal learning program. At the secondary school level efforts to alleviate this inadequacy may need to involve group guidance classes, remedial instruction in basic communication skills, increased use of multi-sensory aids to enlarge the experience of these pupils, increased attention by teachers to providing clear explanations and review of background considerations, increased involvement of parents and community agencies in the educational program of these pupils, establishment of adult education activities directed to helping parents provide desirable developmental experiences which are appropriate for young people, and increased concern by teachers for providing appropriate educative experiences for all young people in their classes. Two of several good resource books for local planning to improve school conditions for these pupils are *Education in Depressed Areas*, edited by A. Harry Passow; Bureau of Publications, Teachers College, Columbia University, New York 27, New York ($4.75) and *School-Home Partnership in Depressed Urban Neighborhoods*, by Gene C. Fusco, U. S. Department of Health, Education, and Welfare (Bulletin 1964, No. 20), U. S. Government Printing Office, Washington ($0.40).

The parents of some dropouts oppose or do not support completion of secondary school by their children. In many cases it appears that the girl dropout may come from a home in which it is believed that early marriage is desirable even if it terminates her education prior to graduation from high school. In some communities these practices may be related to religious beliefs or community tradition. Programs to improve school holding power in these communities may begin with the establishment of communication between the school and the community leaders as well as parents. With a free flow of information and a relationship which encourages objective evaluation of the increased demands for an education as revealed by trends in employment and requirements of effective citizenship, chances are heightened for modification of these attitudes.

Modifications in the school program to increase school holding power should have characteristics of good research. The Division of Educational Research is interested in promoting studies and disseminating the results of experimentation with program modifications directed toward improved school holding power. A review is needed of the effects of program modifications such as those outlined in this section being applied in several schools.

Local research proposals are needed in areas related to the dropout problem which may include topics such as: methods of creating interest and motivation for learning; conditions leading to pupil satisfaction with school; learning characteristics of low-achieving pupils; effects of specific types of teacher attitudes toward individual pupils; relationship of efforts to increase social acceptance and school learning; and depth study into the personality and attitudes of school dropouts. By cooperative studies it is hoped that the Division of Educational Research may coordinate the development and dissemination of valuable information for planning improved secondary education opportunities throughout the State.